

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0117609; AI 110682; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Henderson  
Henderson Wastewater Treatment Plant  
P.O. Box 595  
Henderson, LA 70517
- II. **PREPARED BY:** Afton J. Bessix
- DATE PREPARED:** December 8, 2008
- III. **PERMIT ACTION:** reissue LPDES permit LA0117609, AI 110682; PER20080001  
  
LPDES application received: October 6, 2008  
  
LPDES permit issued: March 1, 2004  
LPDES permit expired: February 28, 2009

### IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Henderson / Henderson Corporation Limits.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 1033 Huval St. in Henderson, St. Martin Parish.
- D. The treatment facility consists of dual sequential batch reactors with reaeration unit. Disinfection is by ultraviolet light.

#### E. Outfall 001

Discharge Location: Latitude 30° 19' 11" North  
Longitude 91° 47' 51" West

Description: treated sanitary wastewater

Design Capacity: 0.220 MGD

Type of Flow Measurement which the facility is currently using:

Combination Totalizing Meter / Continuous Recorder

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**V. RECEIVING WATERS:**

The discharge is into Bayou Portage; thence into West Atchafalaya Borrow Pit Canal in segment 060211 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060211 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 060211	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060211 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060211 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Afton J. Bessix  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

Subsegment 060211, West Atchafalaya Borrow Pit Canal – From Bayou Courtableau to Henderson, LA, includes Bayou Portage, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060211 was previously listed as impaired for organic enrichment/low DO, suspended solids, and turbidity/sedimentation/siltation, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060211:

*Total Maximum Daily Load (TMDL) for TSS, Turbidity, and Siltation for the Bayou Teche Watershed*

According to the *TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed*, "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS effluent limitations will be permitted according to the current permitting policy.

*West Atchafalaya Basin Protection Levee Borrow Pit Canal TMDL for Dissolved Oxygen*

As per the TMDL, "No point source upgrades are recommended because there are no point source discharges that have a significant impact on DO in the Borrow Pit Canal." Therefore limits for the oxygen demanding constituent (BOD<sub>5</sub>) will be included as previously permitted.

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**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	18 lbs/day	10 mg/l	15 mg/l	Limits are set in accordance with the <i>West Atchafalaya Basin Protection Levee Borrow Pit Canal TMDL for Dissolved Oxygen</i> for dischargers of this treatment type and size.
TSS	27 lbs/day	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

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**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0117609: Issued: March 1, 2007  
Expired: February 28, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies				
Colonies/100ml	200	400	2/month	Grab
pH (Standard Units)	---	---	2/month	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates that an inspection was performed on November 28, 2006 for this facility.

Inspector: LDEQ

Findings and/or Violations:

1. The Town of Henderson had completed about 98% of the construction of the collection system.
2. The treatment plant was operating at about 50% capacity and the discharge appeared clear in color
3. The sludge disposal from the plant is being handled by Allied Waste.
4. The secondary flow measuring device was not operational and was due to be replaced the first week of December.
5. All other areas examined appeared satisfactory.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no recent enforcement actions have been administered against this facility:

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning June 2008 through July 2006 has revealed the following violations:

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Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
BOD <sub>5</sub>	001	December 2006	10 mg/l 15 mg/l	12 mg/l 19 mg/l
TSS	001	December 2006	15 mg/l 23 mg/l	21 mg/l 38 mg/l
TSS	001	December 2007	15 mg/l	17 mg/l
Fecal Coliform	001	April 2008	400/100 ml	1,000 ml

\*DMR's were not present for August and September 2006.

## XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.220 MGD.

Effluent loadings are calculated using the following example:

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BOD:  $8.34 \text{ lb/gal} \times 0.220 \text{ MGD} \times 10 \text{ mg/l} = 18.35 \text{ lbs/day}$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 1.0 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Henderson, Henderson Wastewater Treatment Plant, October 6, 2008.